UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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SUPERFUND &
EMERGENCY
MANAGEMENT DIVISION

OCT 08 2019

MEMORANDUM

SUBJECT: Approval and Funding for a Removal Action at the Wallowa Lake Drum Site, Joseph, Wallowa County, Oregon

FROM: Michael Boykin, On-Scene Coordinator
Superfund and Emergency Management Division

THRU: Wally Moon, Section Chief
Superfund and Emergency Management Division

TO: David Allnutt, Acting Division Director
Superfund and Emergency Management Division

SITE ID: 10RQ

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the selected time-critical removal action described herein for the Wallowa Lake Drum Site located near Joseph, Wallowa County, Oregon.

The removal action was conducted as a U.S. Environmental Protection Agency (EPA) lead action in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601, *et seq.* (CERCLA), and the National Contingency Plan (NCP), 40 C.F.R. Part 300.

The scope of this removal action addressed the potential threat of release of hazardous substances to the environment through the removal of drums potentially containing hazardous substances from the bottom of Wallowa Lake. The incident was initiated on June 13, 2019 as a removal assessment and escalated into an emergency response removal action under the CERCLA Section 104 delegation of authority to the On-Scene Coordinator (OSC) under Regional Redelegation R10 14-2, dated April 15, 2019. The removal action field work began on June 16 and ended on June 18, 2019.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

Site Name:	Wallowa Lake Drums
Superfund Site ID (SSID):	10RQ
NRC Case Number:	None
CERCLIS Number:	ORN001020125

Site Location:	72214 Marina Lane, Joseph, Oregon
Latitude:	45.2870917
Longitude:	-117.2141481
Potentially Responsible Party (PRP):	See Confidential Enforcement Addendum
Access:	Granted by Wallowa Lake State Park
NPL Status:	Not proposed as an NPL site
Removal Start Date:	June 16, 2019

1. Removal site evaluation

In August 2018, a community scuba dive group reportedly discovered a 55-gallon drum at the bottom of Wallowa Lake. Blue Mountain Divers (BMD), a local diving group from Walla Walla, Washington, was conducting a club dive to help remove garbage and solid waste when it reportedly observed the 55-gallon drum, labeled 2,4-D or 2,4,5-T Weed Killer (Weed Killer) in the lake. Photos and video documentation indicated that this was an intact, labeled drum. BMD filed a report with the Oregon Department of Environmental Quality (DEQ) Water Quality Program. BMD noted that the drums had markings indicating they once contained or could potentially still contain the herbicides dichlorophenoxyacetic acid (2,4-D) or trichlorophenoxyacetic acid (2,4,5-T). DEQ coordinated with Oregon Health Authority to review City of Joseph (COJ) drinking water data collected since 1985 and found that 2,4-D had not been detected in COJ drinking water samples.

BMD made a second report to DEQ in September 2018, indicating that a 100-gallon drum with the same label was found in Wallowa Lake. DEQ contacted the COJ to report the presence of drums potentially containing herbicides in Wallowa Lake which serves as the COJ drinking water supply. In October 2018, DEQ contacted EPA requesting assistance in assessing these reports and to possibly conduct an investigation and removal.

In April 2019, BMD responded to EPA inquiries, further reporting the finding of twenty-five 55-gallon and twelve 100-gallon drums labeled as 2,4-D or 2,4,5-T Weed Killer on the bottom of the south end of the lake. Additional communication with BMD concluded that the twelve 100-gallon drums were at a depth of approximately 85 feet and appeared to be intact, whereas the twenty-five 55-gallon drums present in the same area did not appear to be intact.
EPA initiated the removal assessment on June 13, 2019 and continued assessment activities on evaluating the drums at the bottom of lake until June 18, 2019. Once labeled and seemingly intact drums were identified during the assessment, EPA transitioned into a time-critical removal of the suspect drums on June 16, 2019. The removal assessment and time-critical removal action was conducted by EPA, Superfund Technical Assessment and Response Team (START), and Emergency and Rapid Response Services (ERRS) contractors, including divers and boat operators as subcontractors to ERRS.

2. Physical Location

The Site is located at Wallowa Lake State Park (Park), south of Highway 351 in the City of Joseph, Wallowa County, Oregon (Site). The Park is located in northeast Oregon and is part of the Wallowa-Whitman National Forest. The Park is approximately 216 acres and provides public access to the south end of Wallowa Lake (Lake), a forested area, and an inlet of the Wallowa River. The Park is accessible year-round for camping and day use. Visitor recreational uses include fishing, hiking, swimming, and boating. The approximate annual visitor overnight attendance is 83,783 and annual day-use attendance is 434,482 (OSP 2019).

The Lake is a glacial-alpine lake at the base of the Wallowa Mountains. The glacial water flows north along the east and west forks of the Wallowa River and converge before the inlet at the south side of the Lake. The Lake's natural outlet is at the north side and a private dam was constructed in 1918 for irrigation. The Wallowa River flows north along the west side of the City of Joseph and continues northwest to a confluence with multiple tributaries. The Lake is 3.5 miles long by 0.75 miles wide and has a surface area of 1,500 acres. The average lake depth is 161 feet and the maximum depth can reach 299 feet, as snowmelt runoff accumulates during late spring/early summer.

The Park is a year-round popular recreational area. Lake water is the primary drinking water source for the City of Joseph and is also used for regional crop irrigation. The United States Fish and Wildlife Service identified bull trout (*Salvelinus confluentus*) as a threatened fish species in Wallowa County (USFWS 2019).

3. Site characteristics

According to the Park website, the Park land was acquired between 1941 and 1954 and is accessible year-round for recreational activities such as fishing, hiking, swimming, and boating. It provides public access to Wallowa Lake along the south end of the lake, and the remaining Lake shoreline has private residences. A historical records search did not find any industries to have operated on the Lake from the time of the Park's acquisition to the present. Therefore, the land use is primarily residential and recreational.

Based on historical accounts of Lake activities, many floating docks were installed using 55-gallon drums which have been found at the lake bottom for years, a remnant of the days when empty drums were used extensively to float docks. It was also common practice for people to fill drums with water, rock or cement to act as an anchor for the floating docks.

The drums of concern were located at the bottom of the Wallowa Lake, near the boat launch in Wallowa Lake State Park. The area of concern within the Lake boundary encompassed Wallowa County jurisdiction. Though 55-gallon drums have been commonly found at the lake bottom for years, the 100-gallon size and chemical markings on the recently found drums were considered unusual.

The Wallowa Lake State Park Rangers and the Wallowa County Sheriff have managed park operations and public safety as the governing bodies for the Site.

There have not been any previous removals at this Site.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The label on one of the submerged drums indicated the possible presence of, and thereby the threat of a potential release of, 2,4-D or 2,4,5-T. These substances are hazardous substances, pollutants, or contaminants as defined by Sections 101(14) and 101(33) of CERCLA, 42 U.S.C. §§ 9601(14) and (33).

The chemical 2,4-D does not occur naturally in the environment. It is the active ingredient in many products used in the United States and throughout the world as an herbicide to kill weeds on land and in the water. There are nine forms of 2,4-D that can be used as an herbicide and it is typically sold as a powder or in a liquid form. Under the Globally Harmonized System (GHS) of Classification, it is listed as corrosive and an irritant. 2,4-D is harmful to aquatic life with long-lasting effects.

The chemical 2,4,5-T is an herbicide with strong irritant properties. Use of this compound on rice fields, orchards, sugarcane, rangeland, and other non-crop sites was terminated by EPA in 1985 (Merck Index, 11th ed). Under GHS Classification, it is classified as an irritant and environmental hazard. 2,4,5-T is very toxic to aquatic life with long-lasting effects.

There was a concern that hazardous substances may have been released into the surface water in the lake, given the label on one of the drums, the condition of the drums, and the unknown quantities involved.

Both chemicals are very heavy molecules that can be a solid or liquid at ambient temperatures. Being at the bottom of the lake, it is possible that the contents of the drums, if any, could have been in a solid/liquid mixture form or sludge. Hazards of concern include dermal and ingestion exposure to humans and exposure to aquatic life.

5. NPL Status

The Site is not listed on the NPL and is not currently proposed to be listed on the NPL.

6. Maps, pictures, and other graphic representations

Refer to attached figures.

- Figure 1 – Area Map
- Figure 2 - Target Assessment Area, Wallowa Lake Drum Removal

B. Other Actions to Date

1. Previous Actions

There are no known previous actions related to the drums of suspected herbicides in Wallowa Lake.

2. Current actions

There are no other current actions at the Site other than the removal actions described herein.

C. State and Local Authorities' Roles

1. State and local actions to date

Due to public concern, DEQ contacted EPA for support to assess the reported drums. EPA and DEQ coordinated response efforts with the City of Joseph, Wallowa Lake State Park, Oregon Department of State Lands, Oregon Department of Fish and Wildlife, Oregon Health Authority, Oregon State Marine Board, Wallowa County Sheriff's Office, Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, and Confederated Tribes of the Colville Reservation.

During the EPA removal action, DEQ coordinated with Wallowa Lake State Park personnel regarding the collection of surface water samples from locations where the public (swimmers, boaters, fishermen, etc.) would have the most contact with surface water and sediments, in close proximity to where the drums were found. In addition, DEQ also collected raw and treated water samples from the City of Joseph Water Treatment Plant.

2. Potential for continued State/local response

DEQ will coordinate with other state and local agencies to determine if there will be future efforts to recover and dispose of rusting, water-filled drums at the bottom of the Lake.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at this Site met the following factors which indicated that the Site was a threat to the public health or welfare or the environment, and a removal action was appropriate under Section 300.415(b)(2) of the NCP. Any or all of these factors were present at the Site, and any one of these factors was determined to be appropriate for implementation of a removal action.

2,4-D is a strong oxidizer that targets the skin, central nervous system, liver, and kidneys through inhalation, skin absorption, ingestion, skin and/or eye contact exposure routes (CDC 2019a). 2,4,5-T is an herbicide that targets the skin, liver, and gastrointestinal tract through inhalation, skin absorption, ingestion, skin and/or eye contact exposure routes (CDC 2019b).

1. **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants (300.415[b][2][i]).**

The presence of these drums at the Site, potentially containing herbicides, posed a potential threat of release and thereby a risk of exposure to humans and aquatic life. The potential release of herbicides could result in exposure by direct contact or ingestion to humans swimming in the Lake, and through ingestion of drinking water. Additionally, the herbicides pose a risk to aquatic life through uptake in the food chain.

2. **Actual or potential contamination of drinking water supplies or sensitive ecosystems.**

Wallowa Lake is the primary drinking water source for the City of Joseph. In addition, a threatened species of trout resides in the Lake. The proximity of these populations to the potential contaminants at the Site present a health risk to humans and the environment.

3. **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.**

An unknown quantity of potential 2,4-D and/or 2,4,5-T could have been present in the labeled drums.

4. **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

The submerged drums were subject to damage through corrosion from the lake water and currents in the Lake, which increased the likelihood that the drums could have released their contents, if any.

5. **The availability of other appropriate federal or state response mechanisms to respond to the release (300.415(b)(2)(vii)).**

There were no other known federal or state agencies that possessed the expertise or resources to conduct the removal action in a timely manner, and to address the actual or potential human health risks associated with hazardous substances, pollutants or contaminants found at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site presented an imminent and substantial endangerment to public health, or welfare, or the environment.

V. REMOVAL ACTIONS AND ESTIMATED COSTS

A. Removal Action Taken

1. Removal Action Description

EPA performed the removal assessment June 13-18, 2019, and the removal action June 16-18, 2019, with START and ERRS contractors on-site to assist. The scope of work was to assess the

drums using boats, divers, and related underwater survey techniques (sonar, a remote-operated vehicle (ROV), etc.). Based on this survey, EPA identified some of the drums as posing the greatest risk. Surface water and sediment samples were collected for analysis of the contaminants of concern, and the greatest-risk drums were removed and overpacked for disposal.

Best-Management Practices (BMPs) during the removal assessment and time-critical removal activities

A daily morning safety meeting was conducted before Site work. Safety measures for workers and the public were implemented during Site activities. Land- and water-based safety officers were assigned, and signage and defined exclusion zones were marked. During the drum removal operations, EPA used overpack drums and secondary containment to prevent the release of any contents.

Assessment and characterization of suspected hazardous substances

On June 13, 2019, EPA, START, and ERRS conducted a site walk. Global Diving & Salvage, Inc. (Global) and Gravity Marine Services (Gravity), as ERRS subcontractors, were also on site to utilize boats, sonar, ROV, and divers for visual and tactile assessment. A dedicated dive boat was provided for divers and dive equipment, and a diver support boat was provided for the remote underwater visualization functions and drum removal operations.

The diver support boat performed an initial survey with sonar surrounding the area of the reported drums. Sonar was used to provide a quick assessment of the lake bottom and delineate an area of concern. The sonar was unable to provide definitive results in the target area; therefore, the ROV was deployed once the area of concern was defined. The ROV was used to clearly visualize and geo-reference the lake bottom and drum debris. Divers were deployed where the ROV could not provide clear images or when the drums appeared to be intact.

During the surveys of the submerged drums, EPA identified only one drum that contained a label indicating the presence of herbicides. This single drum was labeled "2,4-D or 2,4,5-T Weed Killer."

Once the area was surveyed, EPA and START selected eight locations for sediment samples. These locations were chosen based upon their proximity to clusters of drums, as well as the identified Weed Killer drum. These sediment samples were collected by both divers and a Van Veen sampling device. START also collected two water samples daily (one in morning and one in afternoon) during the removal operation period of the project.

The Weed Killer drum was removed from Wallowa Lake on June 16, 2019. This was accomplished by sending a diver and a drum overpack to the bottom of the lake, carefully placing the Weed Killer drum inside of the overpack, and rigging it up to the overhead crane on the boat. The crane on the boat raised the drum from the bottom and transferred it to shore, where it was loaded on a truck and taken to an on-shore secondary containment. Once the drum was safely onshore, further inspection of the " Weed Killer drum showed that it had several holes and was no longer intact.

Most of the 76 drums identified in the survey area had holes and were completely open to the water. However, the survey determined that three drums had labels (including the Weed Killer

drum), and two other drums appeared to be intact. The four additional labeled and/or "intact" drums were removed from the lake, using the same method described above. Upon further examination, all of the drums were determined to not be intact and were open to the lake water. None of the drums contained any amounts of sludge or other solid materials.

The Weed Killer drum and the lake water contents of the drum were retained in separate overpack drums until analytical results were received and the data validated for quality assurance. Preliminary analytical results for the water removed from the "2,4-D or 2,4,5-T"-labeled drum indicated no detections of chlorinated herbicides. The two overpack drums were stored in the Wallowa Lake State Park maintenance yard upon demobilization from the Site. Once the laboratory analytical data was reviewed and validated and the contents found to not have detectable concentrations of chlorinated herbicides, the EPA ERRS contractor coordinated with Wallowa Lake State Park personnel to arrange for appropriate transportation and disposal.

A total of seventy-six 55-gallon drums were identified at the bottom of the lake in the target area and five were removed, including the Weed Killer drum. These five drums were removed because they had suspicious labeling or they initially appeared to be intact. Once the five drums were safely removed, closer inspection revealed that they were all compromised, appearing to only contain lake water and analytical results of samples confirmed the absence of chlorinated herbicides in the Weed Killer drum. None of the reported 100-gallon drums were discovered during the assessment and removal activities. Removal operations ended when the 71 drums remaining in the Lake also were confirmed to be no longer intact and thus, would not contain hazardous substances that would require removal (see Story Map 2019).

Disposal of recovered drums

The five drums recovered and inspected, except the Weed Killer drum, were crushed and placed in a nonhazardous solid waste stream. The liquid collected in the drum overpacks as well as the liquid contents of the recovered drums were consolidated, picked up and processed by the City of Enterprise municipal wastewater system. Liquid collected from the Weed Killer drum was sampled and confirmed free of the constituents of concern before sending it off for non-hazardous disposal.

DEQ provided a roll-off bin to dispose of solid wastes. All solid waste collected in the roll-off bin was sent to the local non-hazardous waste landfill.

Post removal site controls

Post-removal Site controls will not be required because no hazardous wastes were left on Site.

2. Contribution to remedial performance

The Site is not expected to require any further EPA action because the drums did not contain the chlorinated herbicides of concern; therefore, no hazardous substances were identified and no future remedial work is necessary.

3. Description of alternative technologies

There were no viable alternative technologies identified or needed for the Site. Removal of drums and associated wastes is a standard technology for time-critical removal actions.

4. Engineering Evaluation/Cost Analysis (EE/CA)

This was a time-critical removal action, and an EE/CA therefore was not required.

5. Applicable or relevant and appropriate requirements (ARARs)

Removal actions conducted under CERCLA are required to attain Applicable or Relevant and Appropriate Requirements (ARARs) to the extent practicable. In determining whether compliance with ARARs is practicable, EPA may consider the urgency of the situation and the scope of the removal action to be conducted. Given the timeline of this action, EPA did not request a list of ARARs from the State. Based on experience working in the State of Oregon on other sites, EPA has developed the following list of ARARs.

Federal ARARs

Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901, Subtitle "C" - Hazardous Waste Management, 40 C.F.R. Parts 260 to 279. Federal hazardous waste regulations specify hazardous waste identification, management, and disposal requirements. For the management of RCRA hazardous wastes that are not Bevill-exempt, applicability of Subtitle C provisions depends on whether the waste is managed within an Area of Contamination (AOC). 55 FR 8760 (Mar. 8, 1990). Applicable or relevant and appropriate requirements of RCRA Subtitle C (or the state equivalent) may be satisfied by off-site disposal, consistent with the Off-Site Rule, 40 C.F.R. § 300.440. RCRA Subtitle C also provides treatment standards for debris contaminated with hazardous waste ("hazardous debris"), 40 C.F.R. § 268.45, although the lead agency may determine that such debris is no longer hazardous, consistent with 40 C.F.R. § 261.3(f)(2), or equivalent state regulations.

Endangered Species Act, 16 U.S.C. § 1536. The Endangered Species Act (ESA) requires that each federal agency ensure, through consultation, that any action authorized, funded, or carried out by that agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat for endangered or threatened species.

Migratory Bird Treaty Act (MBTA), 16 USC § 703 et seq. The MBTA makes it unlawful to "hunt, take, capture, kill" or take various other actions adversely affecting a broad range of migratory birds, including tundra swans, hawks, falcons, songbirds, without prior approval by the U.S. Fish and Wildlife Service. (See 50 CFR 10.13 for the list of birds protected under the MBTA.) Under the MBTA, permits may be issued for take (e.g., for research) or killing of migratory birds (e.g., hunting licenses). The mortality of migratory birds due to ingestion of contaminated sediment is not a permitted take under the MBTA. The MBTA and its implementing regulations are potentially relevant and appropriate for protecting migratory bird

species identified. The selected response action was carried out in a manner that avoids the taking or killing of protected migratory bird species, including individual birds or their nests or eggs.

State ARARs

Under CERCLA, State of Oregon cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated by the State of Oregon are potential ARARs. Determination of whether these State of Oregon standards, requirements, criteria, and limitations become ARARs is conducted using the eligibility criteria set forth in Section 121 of CERCLA (i.e., the requirements are substantive, promulgated, legally enforceable, generally applicable, more stringent than federal requirements, and identified in a timely manner). Toxic Substance Control Act (TSCA) sets forth various ways to determine the numeric values for ARARs (i.e., cleanup levels) for surface water, groundwater, and soil.

Oregon Wilderness, Recreational, and Scenic Area Rules (OAR 340-013) are applicable to the management of environmental standards within a recreational or wilderness area.

Oregon Solid Waste Management Rules (OAR 340-093 through -097) are applicable to the treatment and disposal of solid waste. Section 340-093-0170 of OAR is applicable to the disposal of cleanup materials contaminated with hazardous substances that are not in themselves hazardous substances, such as petroleum contaminated soil. Such material must be disposed only in landfills meeting the RCRA Subpart D design criteria and that have been authorized to receive this type of material by ODEQ. Section 340-093-0190 of OAR is applicable to the disposal of special wastes, including construction and demolition debris and oil wastes.

Oregon Hazardous Wastes Management Rules (OAR 340-100 through -120) are applicable to soil at the site which exhibits a characteristic of hazardous wastes.

6. Project Schedule

The Site removal assessment and removal action activities were performed from June 13 through 18, 2019 and both assessment and removal action costs are included below. Segregation of assessment versus removal action costs is considered impractical at this time.

B. **Estimated Costs**[1]

Extramural Costs ERRS	**$325,957**
Extramural Costs START	**$ 64,035**
Subtotal	**$389,992**
Cost Contingency	**None**
Total Removal Projected costs	**$389,992**

[1]Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

In the planning stages of this investigation, it was considered to delay the assessment and any possible removal action until the fall 2019, so that lake water levels would drop and there would be reduced recreational traffic. However, due to public concern related to drinking water quality and recreational use, the assessment was moved up to June 2019, before the heavy tourism season began.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

See the attached "Confidential Enforcement Addendum" for enforcement details.

IX. RECOMMENDATION

This decision document represents the implemented time-critical removal action for the Wallowa Lake Drum Site in Joseph, Wallowa County, Oregon developed in accordance with CERCLA as amended, and not inconsistent with the NCP. Conditions at this Site meet the 300.415(b) criteria for a removal action and I recommend approval of the proposed action. This decision document is based on the administrative record for the Site.

The total project ceiling was $389,992 and comes from the Regional Removal Allowance.

X. APPROVAL / DISAPPROVAL

APPROVAL:

R. David Allnutt, Acting Division Director

10/8/19
Date

Superfund and Emergency Management Division

DISAPPROVAL:

R. David Allnutt, Acting Division Director

Date

Superfund and Emergency Management Division

XI. ATTACHMENTS

Attachment A: Confidential Enforcement Addendum
Figure 1: Site Location Map
Figure 2: Drum Assessment Area Map

REFERENCES

Oregon State Parks (OSP) "Park History." *Wallowa Lake State Park,* Oregon State Parks, Retrieved from https://www.oregonstateparks.org/index.cfm?do=parkPage.dsp_parkHistory&parkId=20

U.S. Fish & Wildlife Service (USFWS), "Species by County Report, County: Wallowa, Oregon." *ECOS Environmental Conservation Online System,* Retrieved from http://www.ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=41063

The Merck Index. An Encyclopedia of Chemicals, Drugs, and Biologicals. 11th ed. Ed. S. Budavari. Merck and Co. Inc., Rahway, NJ. 1989.

Centers for Disease Control and Prevention. (CDC 2019a). *2,4-D.* NIOSH Pocket Guide to Chemical Hazards: The National Institute for Occupational Safety and Health (NIOSH). Retrieved from https://www.cdc.gov/niosh/npg/npgd0173.html

Centers for Disease Control and Prevention. (CDC 2019b). *2,4,5-T.* NIOSH Pocket Guide to Chemical Hazards: The National Institute for Occupational Safety and Health (NIOSH). Retrieved from https://www.cdc.gov/niosh/npg/npgd0583.html

Story Map presentation about site activities and findings is available at https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=7012fd95541d4594ab41a06716e3d1ed. (Story Map 2019)

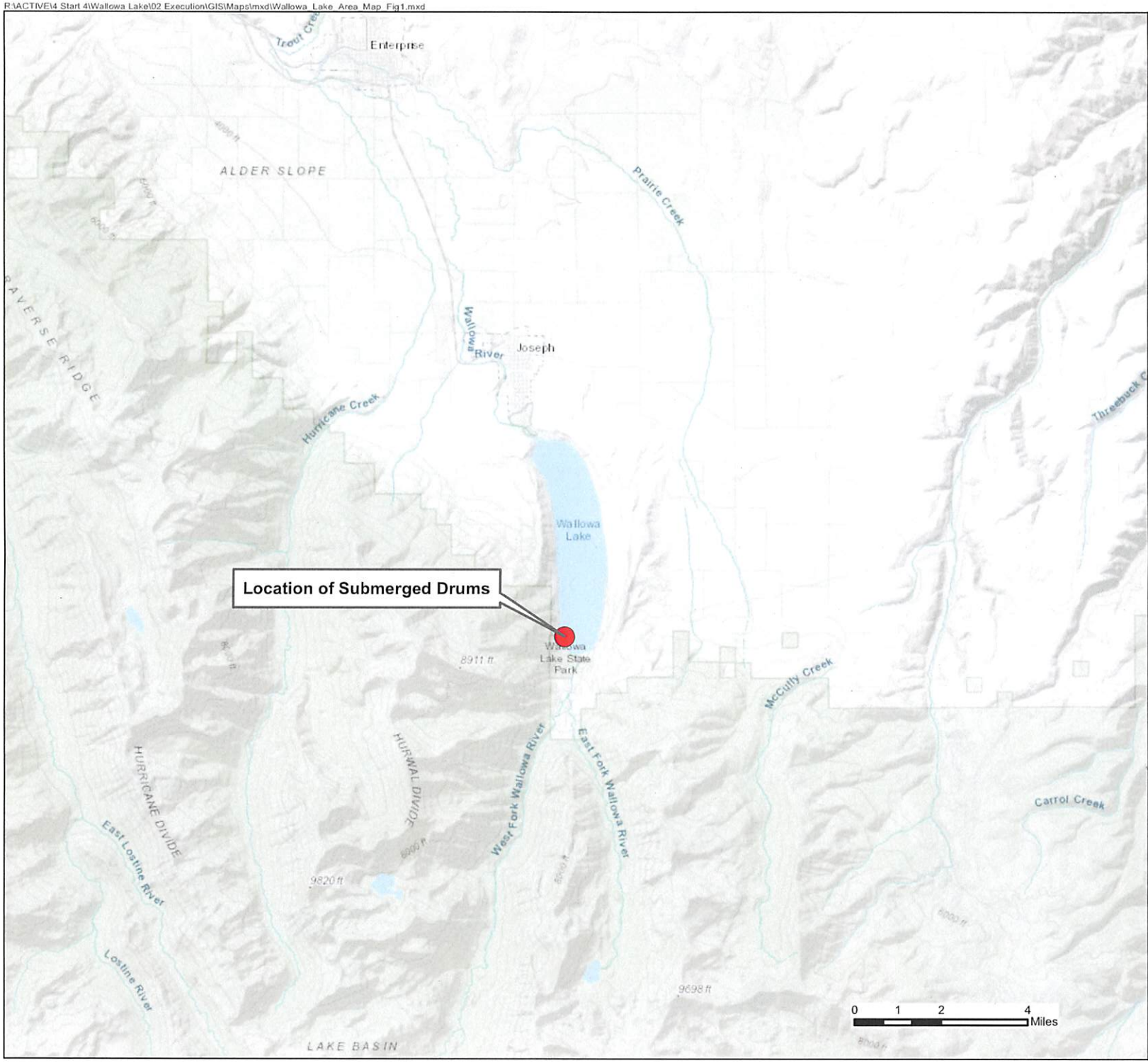

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FIGURE #1
SITE LOCATION
WALLOWA LAKE DRUM REMOVAL
Joseph, Oregon

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA
EMERGENCY RESPONSE

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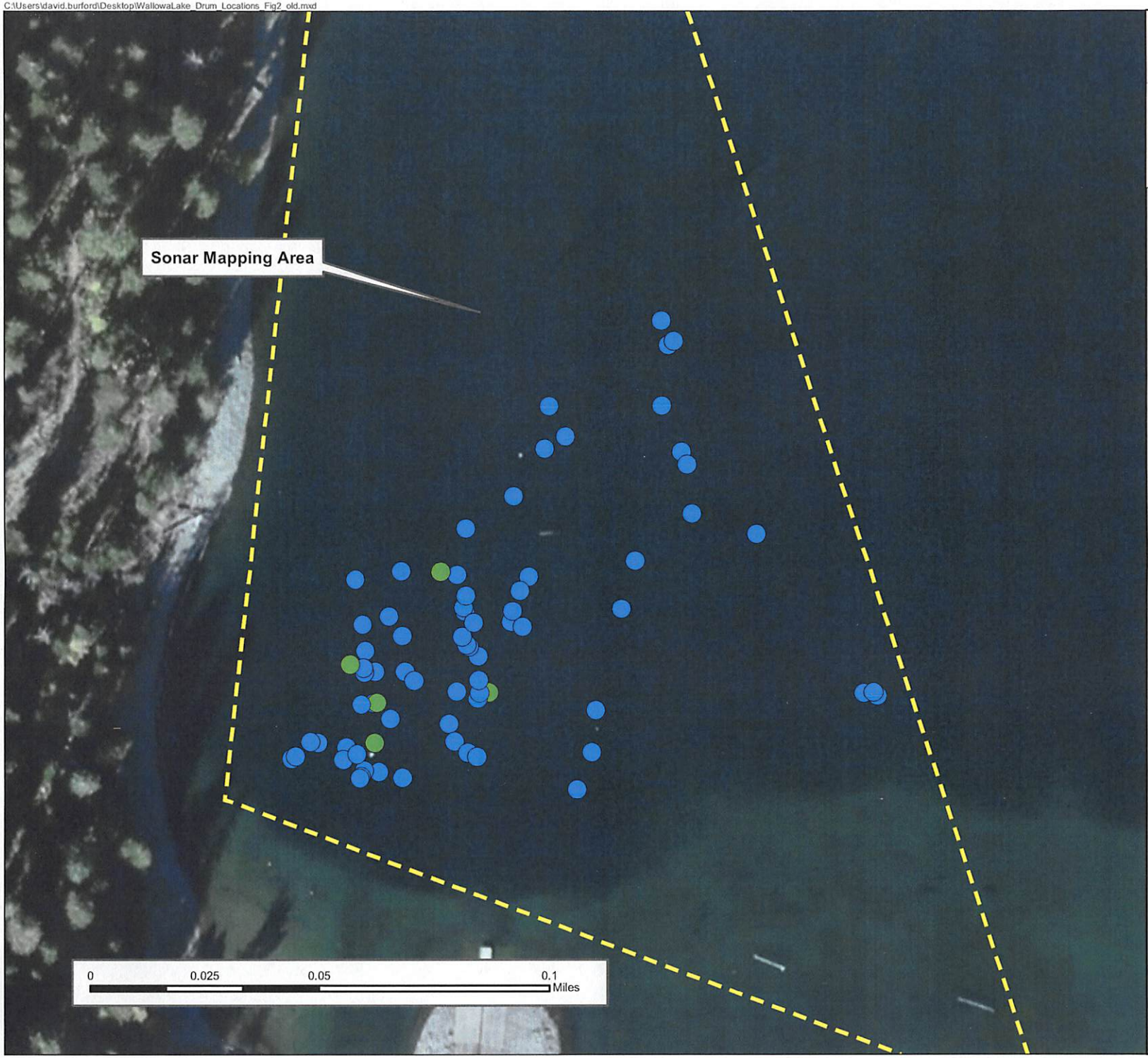

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FIGURE #2
DRUM ASSESSMENT
WALLOWA LAKE DRUM REMOVAL
Joseph, Oregon

Legend

- Drum Assessed & No Action Required
- Drum Removed

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA
EMERGENCY RESPONSE